

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/618,896  
Source: IFwo  
Date Processed by STIC: 7/14/06

***ENTERED***



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/618,896

DATE: 07/14/2006

TIME: 08:34:18

Input Set : A:\960296.00096.txt

Output Set: N:\CRF4\07142006\J618896.raw

3 <110> APPLICANT: Ahlquist, Paul  
 4 Ishikawa, Masayuki  
 5 Barcelona, Juana  
 6 Price, Duane  
 7 Lee, Wai-Ming  
 9 <120> TITLE OF INVENTION: Yeast genes that affect viral replication  
 11 <130> FILE REFERENCE: 960296.00096  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/618,896  
 C--> 13 <141> CURRENT FILING DATE: 2003-07-14  
 13 <160> NUMBER OF SEQ ID NOS: 22  
 15 <170> SOFTWARE: PatentIn version 3.3  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 32  
 19 <212> TYPE: PRT  
 20 <213> ORGANISM: Saccharomyces cerevisiae  
 22 <400> SEQUENCE: 1  
 24 Leu Arg Val Leu Thr Gln Asp Gly Arg Val Tyr Ile Gly Gln Leu Met  
 25 1 5 10 15  
 28 Ala Phe Asp Lys His Met Asn Leu Val Leu Asn Glu Cys Ile Glu Glu  
 29 20 25 30  
 32 <210> SEQ ID NO: 2  
 33 <211> LENGTH: 14  
 34 <212> TYPE: PRT  
 35 <213> ORGANISM: Saccharomyces cerevisiae  
 37 <400> SEQUENCE: 2  
 39 Leu Gly Leu Thr Ile Leu Arg Gly Glu Gln Ile Leu Ser Thr  
 40 1 5 10  
 43 <210> SEQ ID NO: 3  
 44 <211> LENGTH: 32  
 45 <212> TYPE: PRT  
 46 <213> ORGANISM: Saccharomyces cerevisiae  
 48 <400> SEQUENCE: 3  
 50 Val Thr Ile Glu Leu Lys Asn Gly Thr Thr Val Trp Gly Thr Leu Gln  
 51 1 5 10 15  
 54 Ser Val Ser Pro Gln Met Asn Ala Ile Leu Thr Asp Val Lys Leu Thr  
 55 20 25 30  
 58 <210> SEQ ID NO: 4  
 59 <211> LENGTH: 14  
 60 <212> TYPE: PRT  
 61 <213> ORGANISM: Saccharomyces cerevisiae  
 63 <400> SEQUENCE: 4  
 65 Leu Gln Tyr Ile Asn Ile Arg Gly Asn Thr Ile Arg Gln Ile  
 66 1 5 10

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Input Set : A:\960296.00096.txt

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69 <210> SEQ ID NO: 5  
70 <211> LENGTH: 32  
71 <212> TYPE: PRT  
72 <213> ORGANISM: Saccharomyces cerevisiae  
74 <400> SEQUENCE: 5  
76 Ile Trp Leu Phe Glu Gln Ile Gly Ile Arg Ile Lys Gly Lys Ile Val  
77 1 5 10 15  
80 Gly Phe Asp Glu Phe Met Asn Val Val Ile Asp Glu Ala Val Glu Ile  
81 20 25 30  
84 <210> SEQ ID NO: 6  
85 <211> LENGTH: 14  
86 <212> TYPE: PRT  
87 <213> ORGANISM: Saccharomyces cerevisiae  
89 <400> SEQUENCE: 6  
91 Leu Gly Lys Ile Leu Leu Lys Gly Asp Asn Ile Thr Leu Ile  
92 1 5 10  
95 <210> SEQ ID NO: 7  
96 <211> LENGTH: 33  
97 <212> TYPE: PRT  
98 <213> ORGANISM: Saccharomyces cerevisiae  
100 <400> SEQUENCE: 7  
102 Val Gly Val Lys Leu Lys Phe Asn Ser Thr Glu Tyr Arg Gly Thr Leu  
103 1 5 10 15  
106 Val Ser Thr Asp Asn Tyr Phe Asn Leu Gln Leu Asn Glu Ala Glu Glu  
107 20 25 30  
110 Phe  
114 <210> SEQ ID NO: 8  
115 <211> LENGTH: 14  
116 <212> TYPE: PRT  
117 <213> ORGANISM: Saccharomyces cerevisiae  
119 <400> SEQUENCE: 8  
121 Leu Gly Glu Ile Phe Ile Arg Cys Asn Asn Val Leu Tyr Ile  
122 1 5 10  
125 <210> SEQ ID NO: 9  
126 <211> LENGTH: 32  
127 <212> TYPE: PRT  
128 <213> ORGANISM: Saccharomyces cerevisiae  
130 <400> SEQUENCE: 9  
132 Ile Leu Leu Asn Ile Asn Gly Ser Arg Lys Val Ala Gly Ile Leu Arg  
133 1 5 10 15  
136 Gly Tyr Asp Ile Phe Leu Asn Val Val Leu Asp Asp Ala Met Glu Ile  
137 20 25 30  
140 <210> SEQ ID NO: 10  
141 <211> LENGTH: 14  
142 <212> TYPE: PRT  
143 <213> ORGANISM: Saccharomyces cerevisiae  
145 <400> SEQUENCE: 10  
147 Ile Gly Met Val Val Ile Arg Gly Asn Ser Ile Ile Met Leu  
148 1 5 10

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Input Set : A:\960296.00096.txt

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151 <210> SEQ ID NO: 11  
152 <211> LENGTH: 32  
153 <212> TYPE: PRT  
154 <213> ORGANISM: *Saccharomyces cerevisiae*  
156 <400> SEQUENCE: 11  
158 Ile Phe Val Leu Leu Arg Asp Gly Arg Met Leu Phe Gly Val Leu Arg  
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162 Thr Phe Asp Gln Tyr Ala Asn Leu Ile Leu Gln Asp Cys Val Glu Arg  
163 20 25 30  
166 <210> SEQ ID NO: 12  
167 <211> LENGTH: 14  
168 <212> TYPE: PRT  
169 <213> ORGANISM: *Saccharomyces cerevisiae*  
171 <400> SEQUENCE: 12  
173 Arg Gly Ile Phe Met Ile Arg Gly Glu Asn Val Val Met Leu  
174 1 5 10  
177 <210> SEQ ID NO: 13  
178 <211> LENGTH: 31  
179 <212> TYPE: PRT  
180 <213> ORGANISM: *Schizosaccharomyces pombe*  
182 <400> SEQUENCE: 13  
184 Ile Val Val Leu Arg Asp Gly Lys Lys Leu Ile Gly Ile Leu Arg Ser  
185 1 5 10 15  
188 Phe Asp Gln Phe Ala Asn Leu Met Leu Gln Tyr Thr Ile Glu Arg  
189 20 25 30  
192 <210> SEQ ID NO: 14  
193 <211> LENGTH: 14  
194 <212> TYPE: PRT  
195 <213> ORGANISM: *Schizosaccharomyces pombe*  
197 <400> SEQUENCE: 14  
199 Arg Gly Val Tyr Ile Val Arg Gly Glu Asn Val Val Leu Leu  
200 1 5 10  
203 <210> SEQ ID NO: 15  
204 <211> LENGTH: 31  
205 <212> TYPE: PRT  
206 <213> ORGANISM: *Homo sapiens*  
208 <400> SEQUENCE: 15  
210 Leu Val Leu Leu Arg Asp Gly Arg Thr Leu Ile Gly Phe Leu Arg Ser  
211 1 5 10 15  
214 Ile Asp Gln Phe Ala Asn Leu Val Leu His Gln Thr Val Glu Arg  
215 20 25 30  
218 <210> SEQ ID NO: 16  
219 <211> LENGTH: 14  
220 <212> TYPE: PRT  
221 <213> ORGANISM: *Homo sapiens*  
223 <400> SEQUENCE: 16  
225 Arg Gly Ile Phe Val Val Arg Gly Glu Asn Val Val Leu Leu  
226 1 5 10  
229 <210> SEQ ID NO: 17

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Input Set : A:\960296.00096.txt

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230 <211> LENGTH: 31  
231 <212> TYPE: PRT  
232 <213> ORGANISM: Caenorhabditis elegans  
234 <400> SEQUENCE: 17  
236 Leu Val Val Leu Arg Asp Gly Arg Lys Leu Ile Gly Phe Leu Arg Ser  
237 1 5 10 15  
240 Ile Asp Gln Phe Ala Asn Leu Ile Leu Glu Asp Val Val Glu Arg  
241 20 25 30  
244 <210> SEQ ID NO: 18  
245 <211> LENGTH: 14  
246 <212> TYPE: PRT  
247 <213> ORGANISM: Caenorhabditis elegans  
249 <400> SEQUENCE: 18  
251 Gln Gly Phe Met Leu Ile Arg Gly Glu Asn Val Glu Leu Ala  
252 1 5 10  
255 <210> SEQ ID NO: 19  
256 <211> LENGTH: 32  
257 <212> TYPE: PRT  
258 <213> ORGANISM: Saccharomyces cerevisiae  
260 <400> SEQUENCE: 19  
262 Leu Ile Val Ser Thr Leu Glu Asp Arg Ile Leu Val Gly Ser Leu Val  
263 1 5 10 15  
266 Ala Val Asp Ala Gln Met Asn Leu Leu Leu Asp His Val Glu Glu Arg  
267 20 25 30  
270 <210> SEQ ID NO: 20  
271 <211> LENGTH: 14  
272 <212> TYPE: PRT  
273 <213> ORGANISM: Saccharomyces cerevisiae  
275 <400> SEQUENCE: 20  
277 Gly Leu Val Ser Val Pro Arg Arg Ser Val Lys Thr Ile Met  
278 1 5 10  
281 <210> SEQ ID NO: 21  
282 <211> LENGTH: 33  
283 <212> TYPE: PRT  
284 <213> ORGANISM: Artificial  
286 <220> FEATURE:  
287 <223> OTHER INFORMATION: conserved sequence of Sm motif 1  
290 <220> FEATURE:  
291 <221> NAME/KEY: MISC\_FEATURE  
292 <222> LOCATION: (1)..(1) /  
293 <223> OTHER INFORMATION: X is a hydrophobic amino acid  
295 <220> FEATURE:  
296 <221> NAME/KEY: MISC\_FEATURE  
297 <222> LOCATION: (2)..(2) /  
298 <223> OTHER INFORMATION: X can be any amino acid  
300 <220> FEATURE:  
301 <221> NAME/KEY: MISC\_FEATURE  
302 <222> LOCATION: (3)..(3) /  
303 <223> OTHER INFORMATION: X is a hydrophobic amino acid

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305 <220> FEATURE:  
306 <221> NAME/KEY: MISC\_FEATURE  
307 <222> LOCATION: (4)..(4)  
308 <223> OTHER INFORMATION: X can be any amino acid  
310 <220> FEATURE:  
311 <221> NAME/KEY: MISC\_FEATURE  
312 <222> LOCATION: (6)..(11)  
313 <223> OTHER INFORMATION: X can be any amino acid  
315 <220> FEATURE:  
316 <221> NAME/KEY: MISC\_FEATURE  
317 <222> LOCATION: (12)..(12)  
318 <223> OTHER INFORMATION: X is a hydrophobic amino acid  
320 <220> FEATURE:  
321 <221> NAME/KEY: MISC\_FEATURE  
322 <222> LOCATION: (13)..(13)  
323 <223> OTHER INFORMATION: X can be any amino acid  
325 <220> FEATURE:  
326 <221> NAME/KEY: MISC\_FEATURE  
327 <222> LOCATION: (15)..(15)  
328 <223> OTHER INFORMATION: X can be any amino acid  
330 <220> FEATURE:  
331 <221> NAME/KEY: MISC\_FEATURE  
332 <222> LOCATION: (16)..(16)  
333 <223> OTHER INFORMATION: X is a hydrophobic amino acid  
335 <220> FEATURE:  
336 <221> NAME/KEY: MISC\_FEATURE  
337 <222> LOCATION: (17)..(19)  
338 <223> OTHER INFORMATION: X can be any amino acid  
340 <220> FEATURE:  
341 <221> NAME/KEY: MISC\_FEATURE  
342 <222> LOCATION: (21)..(22)  
343 <223> OTHER INFORMATION: X can be any amino acid  
345 <220> FEATURE:  
346 <221> NAME/KEY: MISC\_FEATURE  
347 <222> LOCATION: (25)..(25)  
348 <223> OTHER INFORMATION: X is a hydrophobic amino acid  
350 <220> FEATURE:  
351 <221> NAME/KEY: MISC\_FEATURE  
352 <222> LOCATION: (26)..(26)  
353 <223> OTHER INFORMATION: X can be any amino acid  
355 <220> FEATURE:  
356 <221> NAME/KEY: MISC\_FEATURE  
357 <222> LOCATION: (27)..(27)  
358 <223> OTHER INFORMATION: X is a hydrophobic amino acid  
360 <220> FEATURE:  
361 <221> NAME/KEY: MISC\_FEATURE  
362 <222> LOCATION: (28)..(31)  
363 <223> OTHER INFORMATION: X can be any amino acid  
365 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 07/14/2006  
PATENT APPLICATION: US/10/618,896                    TIME: 08:34:19

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:21; Xaa Pos. ~~1,2,3,4,6,7,8,9,10,11,12,13,15,16,17,18,19,21,22,25,26,27~~  
Seq#:21; Xaa Pos. ~~28,29,30,31,33~~  
Seq#:22; Xaa Pos. 1,3,4,5,6,9,11,12,13,14

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:21,22

VERIFICATION SUMMARY

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Input Set : A:\960296.00096.txt

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0

M:341 Repeated in SeqNo=21

L:435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0